

AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 3-13, and 15-25, and cancel claim 26 as follows. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for interactive control of a plastics material injection molding machine, where, via an input unit, which is provided with actuating fields, operating parameters necessary for an operating sequence of a machine are input, in a form which prompts an operator, into a data processing unit which stores these operating parameters, and subsequently one or more operating sequences are carried out in accordance with the stored operating parameters, the method comprising:

~~wherein recording~~ a data set covering basic rules of the operating sequence of the machine ~~is recorded~~ in the data processing unit and, by using the data set, ~~as a result, providing~~ the operator ~~is provided~~ on a surface graphical user interface with visualization of a selected choice of input possibilities, based on a machine configuration and a machine environment, for additional parts of the operating sequence that can be added in a compatible manner into existing parts of the operating sequence,

~~wherein providing to an operator, for manual input and/or for input by means of a manipulator, the input unit makes available to the operator~~ on the surface graphical user interface a selected choice of actuating fields corresponding to the additional parts of the operating sequence and for navigation on a navigation surface statically arranged on the surface graphical user interface, ~~and~~

wherein the navigation surface comprising at least three lines or three columns of actuating and input fields is hierarchical from line to line or column to column and is represented on the surface graphical user interface with a plurality of navigation levels associated with one another such that the operator is able to visualize a path through the at least three lines or three columns of actuating and input fields, and

wherein, when the operator's input is made, even at a hierarchically higher level input possibilities are visualized as a selected choice based on the operator's input.

2. (Previously Presented) The method according to claim 1, wherein the actuating fields are imaged as input fields.

3. (Currently Amended) The method according to claim 1, wherein the ~~hierarchical~~ navigation surface is represented with three lines.

4. (Currently Amended) The method according to claim 1, ~~wherein~~ further comprising the step of representing a parameter region is represented on the surface graphical user interface for numeric and/or graphic representation of operating parameters.

5. (Currently Amended) The method according to claim 1, ~~wherein in addition to the navigation levels,~~ further comprising the step of representing a sequence editor representing the operating sequence in a schematic manner is represented on the surface graphical user interface in addition to the plurality of navigation levels.

6. (Currently Amended) The method according to claim 1, wherein the operating sequence comprises a plurality of sequence symbols, and, when a sequence symbol of the plurality of sequence symbols is tapped, parameter images associated with the sequence symbol are displayed on the respective navigation level.

7. (Currently Amended) The method according to claim 1, wherein the navigation levels comprise at least one top navigation level and at least one bottom navigation level and when three navigation levels are provided, the at least one top navigation level is represented symbolically in one line, ~~whilst~~ and the at least one bottom navigation level is represented completely in the additional lines.
8. (Currently Amended) The method according to claim 1, wherein the operating sequence comprises sequence symbols and in the event of an alarm, the sequence symbols of the operating sequence relating to the alarm are identified and wherein tapping the sequence symbols leads to the representation of a relevant parameter region.
9. (Currently Amended) The method according to claim 1, ~~wherein~~ further comprising the step of providing favorite fields that are preset or are presettable on the ~~surface graphical user interface~~ by the user operator and when actuated the favorite fields lead to a jump, independent of the navigation, to a preset or presettable parameter group.
10. (Currently Amended) The method according to claim 9, wherein when the favorite field is actuated, ~~the~~ a parameter image edited last in the associated parameter group is displayed.
11. (Currently Amended) The method according to claim 1, ~~wherein~~ further comprising the step of representing tables ~~are represented~~ on the surface graphical user interface for inputting operating parameters and wherein, from these, a preferably non-editable graphic representation of the required values converted therefrom is generated.

12. (Currently Amended) The method according to claim 1, ~~wherein~~ further comprising the step of representing an editable input diagram is represented on the surface graphical user interface.

13. (Currently Amended) The method according to claim 12, wherein the representation of the input of the operating parameters for ~~the~~ various directions of axes displacement of the plastics material injection molding machine is effected in the direction of axes displacement.

14. (Previously Presented) The method according to claim 1, wherein the method is carried out on a cyclically operating plastics material injection molding machine.

15. (Currently Amended) An apparatus for interactive control of a plastics material injection molding machine, ~~having~~ the apparatus comprising:

a data processing unit,

an input unit with fields arranged on a ~~surface~~ graphical user interface for manual input and/or for input by means of a manipulator, by means of which fields, in a form which prompts an operator, operating parameters necessary for an operating sequence of the machine can be input into the data processing unit which stores the operating parameters for subsequently carrying out one or more operating sequences in accordance with the stored operating parameters, wherein the fields are actuating fields for navigation on a navigation surface statically arranged on the ~~surface~~ graphical user interface, and

a data set recorded in the data processing unit and covering basic rules of the operating sequence of the machine,

~~using wherein~~ the data set and as a result, provides a selected choice of possible input

possibilities for additional parts of the operating sequence, said possible input possibilities being offered to the operator, displayed on a surface the graphical user interface, of possible input possibilities, and based on machine configuration and machine environment, for additional parts of the operating sequence such that the additional parts of the operating sequence that can be added in a compatible manner into existing parts of the operating sequence,

wherein the navigation surface comprises at least three lines or at least three columns of actuating ~~and~~ fields that are at the same time input fields, and the navigation surface is hierarchical from line to line or column to column and comprises a plurality of navigation levels associated with one another such that the operator is able to visualize a path through the at least three lines or three columns of actuating and input fields, and

wherein, when the operator's input is made, even at a hierarchically higher level input possibilities are visualized as a selected choice based on the operator's input.

16. (Currently Amended) The apparatus according to claim 15, wherein the actuating fields are imaged as the input fields.

17. (Currently Amended) The apparatus according to claim 15, wherein the ~~hierarchical~~ navigation surface includes three lines.

18. (Currently Amended) The apparatus according to claim 15, ~~wherein~~ further comprising a parameter region is provided on the surface graphical user interface for numeric and/or graphic representation of the operating parameters.

19. (Currently Amended) The apparatus according to claim 15, ~~wherein~~ further comprising in

~~addition to the navigation levels~~, a sequence editor representing the operating sequence in a schematic manner ~~is provided on the surface~~ graphical user interface in addition to the plurality of navigation levels.

20. (Currently Amended) The apparatus according to claim 15, wherein the navigation levels comprise at least one top navigation level and at least one bottom navigation level and when three navigation levels are provided, sequence symbols for the at least one top navigation level is provided in one line, ~~whilst~~ and elements of the at least one bottom navigation level where necessary are provided completely in the additional lines.

21. (Currently Amended) The apparatus according to claim 15, ~~wherein~~ further comprising identification means ~~are provided~~ for identifying sequence symbols of the operating sequence related to an alarm.

22. (Currently Amended) The apparatus according to claim 15, ~~wherein~~ further comprising preset favorite fields or favorite fields that are presettable by the ~~user operator~~ are provided on the surface, said preset favorite fields or said favorite fields that are presettable by the operator being provided as jump keys on the graphical user interface for a jump independent of the navigation to a preset or presettable parameter group.

23. (Currently Amended) The apparatus according to claim 22, ~~wherein~~ further comprising a linking of the jump keys with a parameter image last edited within the associated parameter group ~~is provided.~~

24. (Currently Amended) The apparatus according to claim 15, ~~wherein~~ further comprising, on the graphical user interface, a non-editable graphic representation of required values converted from the input parameters and/or an editable input diagram ~~is provided on the surface.~~

25. (Currently Amended) A ~~data-carrier~~ having non-transitory computer readable medium comprising a program for the accomplishment of the method according to claim 1.

26. (Cancelled).